BRUHAT BANGALORE MAHANAGARA PALIKE

Name of Work:- Additional Development works to Parks at Sandeep Unnikrishnan Road in Attur Ward no 03.

Modified Estimate

Est Cost: =200.00 Lakhs

Sl. No.	Description of work	Unit	No.	Length m	Breadth m	Depth m	Quantity	Rate in Rs.	Amount in Rs.
1	KSRRB 200-8. Clearing and grubbing road land including uprooting rank vegetation, grass, brush, shrubs, saplings and trees of girth upto 300mm, by manual means, in area of light jungle, removal of stumps, disposal of unserviceable materials, stacking of serviceable materials labour charges complete as per specifications. MORTH / Chapter 2 (P.No.138, I.No.18.11 of PW, P&IWTD SR 2018-19)								
	Park	Sqm							
	Park Area 2		1.0	402.00	9.00		3618.00		
	Park Area 1		1.0	50.00	9.00		450.00		
	End Portion		0.5	18.00	9.00		81.00		
				452.00					
							4149.00	11.12	46136.88
	Approved Rate	11.12							
2	Removal of Unserviceable Soil with Disposal KSRRB M300-19. Removal of unserviceable soil including excavation, loading and disposal but excluding replacement by suitable soil which shall be paid separately as per clause 300.5 complete as per specifications. MORTH Specification No. 301(Page No.144 Item No 19.20 of KPWD S.R 2018-19)								
	Removal of Debris	Cum							
							0.00	36.69	0.00
	Approved Rate	36.69							
3	KSRB15-3.9 :Providing 20mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as per specifications.								
	Plastering								
	Park Area 2		1.0	402.00	2.65		1065.30		
	Park Area 1		1.0	68.00	2.55		173.40		
		Sqm				Total Qnty	1238.70	282.43	349846.04
	Approved Rate	282.43							
4	15.105 Providing Texturedpaint of approved quality, colour and shade to wall surface after cleaning and rubbing the wall surface with wire brush of medium size emery stone to remove all the loosely adhering particles the surface is then cleaned with water and ensured that it is in line and level . The textured material is then mixed with 40-50% of clean water until and homogenous thick slurry is formed the slurry is formed the slurry is left for 5-10 min to react completly with ingredients. The texture finish prepared as above is then applied to the wall surface with suitable roller/ spray/ gun/putty blade trowl to get the desired finish. The finished surface shall applied with two coats of external paint of approved shade> incidential charges etc. Complete as per directions of engineer in charge of the Work.								
	Plastering Surface.								

Park Area 2			1.0	402.00	2.65		1065.30		
Park Area 1			1.0	68.00	2.55		173.40		
	Sqm				Total Qnty		1238.70	488.14	604659.02
Approved Rate	488.14								604659.00

	KSRRB M300-1. Earth work excavation by manual means in ordinary soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m, excavated surface levelled and sides neately dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specification. MORTH / Chapter 3 (P.No.143, I.No.19.1 of PW, P&IWTD SR 2018-19)								
		Cum							
	Removal of Debris								
	Big Lump		2	6.00	6.00	0.76	54.72		
	Other Lumps		10	3.00	5.00	0.56	84.00		
	Broken Concrete/ Construction Materials laying in Park 1 and 2		2	28.00	4.50	0.27	68.04		
			1	2.50	10.00	0.55	13.75		
			1	4.00	6.20	0.45	11.16		
			1	10.50	8.50	0.45	40.16		
	Drain De Silting								
5	Park Area2		1.0	402.00	0.80	0.80	257.28		
	Park Area1		1.0	50.00	0.80	0.80	32.00		
	Kerb Stones		3.0	468.00	0.30	0.20	84.24		
	Pathway Inside Park & Outside								
	Park 1 & 2	(3.3+2.5) = 5.8	1	468.00	5.80	0.25	678.60		
	For Shoulder Drains Park 1 to 2 (15m interval)		33	12.00	0.60	0.40	95.04		
							1418.99	222.17	315257.56
	Approved Rate	222.17							315257.00

	KSRRB M200 -19.1 Dismantelling of existing structures like culvert, bridges, retaining walls and other structure comprising of masonry, cement concrete, wood work, steel work, including T& P and scaffolding wherever necessary sorting the dismantelled material, disposal of unserviceable material and stacking the servicebale material, with all lifts complete as per specification Scrapping of stones from dismantelled stone masonry in cement mortor (KSRRB M200 19.1, It No.18.38. P No. 139,140)								
	For RCC Drain	CUM							
	Damaged / Weak Portion								
6	Consider 35% of Total Length		468.00	*35%					
	Sides		2	163.8	0.3	1.2	117.94		
							117.94	885.54	
	Approved Rate	885.54							104437.05

7	KSRB-4-1.3 : Providing and laying in position plain cement concrete of mix M 1:4:8 withOPC cement at 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @0.57cum machine mixed, concrete laid in layers not, exceeding 15cms, thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1,4.2,P No. 13/ Item No. 4.3/ PWD SR 2018-19								
		Cum							
	Walking track		1	468	2.2	0.15	154.44		
	Pathway beside Road		1	468	2.3	0.15	161.46		
	Deduct Trees		-5	1.00	1.00	0.15	-0.75		
			-5	2.50	2.50	0.15	-4.69		
	Drain Bottom		1	470	0.9	0.15	63.45		
						Total Qnty	373.91	5673.12	2121250.48
									2121236.00
	Approved Rate	5673.12							
8	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2. (P.No. 12/I.No. 4.2 of CSR 2015-16)								
	Bed Concrete	Cum							
	Coping Concrete For Drain		2	468.00	0.3	0.2	56.16		
	Kerb PCC		3	468.00	0.20	0.10	28.08		
	Kerb, Pathway beside Road		1	468.00	0.20	0.10	9.36		
	Coping For Compound wall		1	468.00	0.15	0.15	10.53		
						Total Qnty	104.13	5775.42	601394.48
	Approved Rate	5775.42							
9	Providing and laying in position plain/Reinforced cement concrete M20 for sub-structure/Superstructure works, with cement @ 320 kgs,20mm & down size graded granite metal course aggregate at 0.69 cum and fine aggregates @ 0.46 cum machine mixed with super plasticizers @ 3 its confirming to IS 9103-2008, concrete layed in layers, well compacted and providing weep holes whemever neccesary, with neccesary scaffoldings, from work etc., including cost of labour, HOM curing etc., complete. (Page No.257. I No 34.17 of KPWD S.R 2018-2019)								
		Cum							
	For Shoulder Drains Park 1 to 2(15m interval)								
	32.00		33	12.00	0.60	0.15	35.64		
	Parks 1 to 2, Drain Slab		1	468.00	1.70	0.18	143.21		
						Total Qnty	178.85	5536.35	990165.12
	Approved Rate	5536.35							
	KSRB 5-14.1: Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lesser than 1800 kg/m3 and having a minimum average compressive strength 5.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 ; as per IS 2572:2005 including cost of materials, labour charges,scaffolding ,curing complete as per specifications. KBS No.5.4 (Page No.27. I No 5.27.2 of KPWD S.R 2018-2019)								
	For Shoulder Drains Park 1 to 2 (15m interval)	Cum							

	Compound Wall (damaged Portion		33	12.00		0.20	79.20		
10			1	30.00		1.80	54.00		
			1	60.00		1.20	72.00		
			1	60.00		1.20	72.00		
			1	60.00		1.50	90.00		
			1	60.00		1.00	60.00		
			1	60.00		1.00	60.00		
			1	60.00		1.00	60.00		
	Top portion		1	468.00		0.25	117.00		
						Total Qnty	664.20	1059.68	703839.46
	Approved Rate	1059.68							
	Providing and Fixing pre cast covering Slab made out of CC 1:2:4 with 10cm thick and Finishing cutting ,including form work,curing,including cost of alll materials, labour,hire charges of machinery,loading,unloading,lead and lift,transportation etc ,copmplete. (Data Rate)								
	For Shoulder Drains Park 1 to 20 (15m interval)	Cum							
11	32.00		33	12.00	0.60		237.60		
						Total Qnty	237.60	2451.51	582478.78
	Approved Rate	2451.51							
	KSRRB M300-18. Wrought iron and mild steel welded work (using angles, square bars, tees and channel grills, grating frames, gates and tree guards of any size and design etc. including cost of screens and welding rods or bolts and nuts complete fixed in position but without the cost of excavation and concrete for fixing which will be paid separately complete as per specifications. (Page No.150. I No.19.97 of KPWD S.R 2018-2019)								
	For Shoulder Drains Park 1 to 6 (15m interval)	Quintal							
12	32.00		32			0.11	3.39		
						Total Qnty	3.39	7991.51	27107.20
	Approved Rate	7991.51							
	Providing and fixing for flooring 20mm thick gang saw water cut sadarhalli gray granite in CM 1:4 proportion, cut to required shape, pattern with paper joints, finished with cement mortar using white cement and colour pigments to match the colour of slab making through jointing with sealant, groves in joints including cost of curing - minimum width of 900mm. (P.No 112, I.No.14.61.2 of PW,P&IWTD S.R 2018-19)								
13		Sqm							
							0.00	2200.53	0.00
	Approved Rate	2200.53							
	Providing full nosing for 20mm thick granite slab using required machinery including cost and convey ance of all materials,labour for all items of work,HOM etc., complete as per specification. (P.111/I.14.55 PW,P&IWTD,BENGALURU CIRCLE-SR 2018 -19)								
		RMT							
14									
							0.00	300.22	0.00
	Approved Rate	300.22							

	KSRB 5.2-2 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:8, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13								
	Basement	Cum							
	RCC Drain Sides		2	467.00	0.30	1.20	336.24		
	Consider 35%						117.68		
	New SSM, Coping		2	467.00	0.20	0.30	56.04		
	Missing Length		1	30.00	0.20	0.80	4.80		
15			1	30.00	0.20	0.80	4.80		
			1	30.00	0.20	0.80	4.80		
			1	30.00	0.20	0.80	4.80		
			1	30.00	0.20	0.80	4.80		
	Drain Bottom		1	470	0.9	0.2	84.60		
						Total Qnty	282.32	4997.06	1410789.97
	Approved Rate	4997.06							
	Providing and Fixing pre cast covering Slab 250mm thick made out of CC 1:2:4 and jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge								
		Sqm							
16	Damaged Portion								
							0.00	5,689.48	0.00
	Approved Rate	5689.48							
	KSRB 14.6-1: Providing & laying heavy duty cobble stones 60mm thick interlock pavers,using cement & course sand for manufacture of blocks of approved size ,shape and colour with a minimum compressive strength of 281 kg per sqm over 50mm thick sand bed (Avg thickness) and compacting with plate vibrator having 3 tons compaction force thereby forcing part of sand underneath to come up in between joints, final compaction of paver surface joints into its final level, including cost of materials, labour and HOM of machineries complete as per specifications. Specification No. KBS (P.No 103 of I.No.14.6 in PW,P&IWTD SR 2018-19)								
	Parks	Sqm							
17									
	Walking track		1	468	2.2		1029.60		
	Pathway beside Road		1	468	2.3		1076.40		
	Deduct Trees		-5	1.00	1.00		-5.00		
			-5	2.50	2.50		-31.25		
							2069.75	1170.87	2423408.18
	Approved Rate	1170.87							
	5.29(b) Providing and fixing pre cast solid cement concrete kerb stones made out of C.C 1:2:4 with top and bottom width 114 and 165mm repectively, 400mm high and 450mm in length finished with CM 1:3 plastering and finishing cutting, including formwork curing, including, cost of all materials, labour hire charges of machinery, loading unloading, lead and lift, transportation etc, complete. Page No. 27/ Item No. 5.30/ PWD SR 2018-19								
		Nos							
	Park		3	468					
18	Kerb Stones		1	468			3120.00		
	Pathway beside Road						1040.00		
							4160.00		
							9245.00	500.37	4625920.65

	Approved Rate	500.37								
	KSRRB 800-1. Painting two coats after filling the surface with synthetic enamel paint in approved shades on new plastered concrete surfaces, with materials, labour complete as per specifications. MORTH Chapter 8 (Page No.180. Iitem no.24.1 of KPWD S.R Bangalore Circle 2018-2019)									
	0.00	Nos								
19	Kerb Stones		3	468		0.35	491.40			
	Pathway beside Road		1	468		0.35	163.80			
							655.20	88.96	58286.59	
	Approved Rate	88.96								
	Construction of granular sub-base Grading-V as Sub-base and drainage layer by providing coarse graded crushed stone aggregates of granite/ trap/basalt material,mixing by mix in place method with rotavator at OMC, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the 98 % proctor density, complete as per specifications. Clause 401 of MORTH V Revision.9(I No. -20.5, P No 153									
		CUM								
EIRL-1	Parks 1 to 2, Cycle Track		1	468.00	1.50	0.15	105.30			
	Walking trak		1	20	3.3	0.1	6.60			
							111.90	1994.92	223231.55	
	Basic Rate Rs.=	1882.00								
	Add 6% A.W Rs. =	112.92								
	Total Rate Rs. =	1994.92								
	Constructing un-reinforced, plain cement concrete for pavements using Grade concrete M30 with OPC at 360 kg/cum and coarse aggregate 0.69cum, fine aggregate 0.46cum. over a prepared base with OPC coarse aggregate at 0.69 cum, fine aggregates at 0.46 cum,Coarse and fine aggregate conforming to IS:383-2016, with Superplastizer at 3 lts conforming to IS 9103-2008. mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). & Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished with floaters in a continuous operation including provision of contraction, expansion, construction and longitudinal joints,including groove cutting charges, joint filler, separation membrane of impermiable plastic sheet of 125 micron, sealant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades, textured with texturing machine, and curing including cost of all materials, labour,hire charges of machineries,all									
EIRL-2	lead & lift charges etc., complete as per specifications. (P.No-176,I No-22.6.1)									
	0	Cum								
	Parks 1 to 2, Cycle Track		1	468.00	1.70	0.10	79.56			
	Parks 1 to 2, Cycle Track, WMM Portion		1	468.00	1.20	0.15	84.24			
							163.80	5634.31	922899.49	
	Basic Rate Rs.=	4916.00								
	Issue Rate =(7.2*55.47)	399.38								
	Add 6% A.W Rs. =	318.92								
	Total Rate Rs. =	5634.31								
	KSRB 4.9.2 : Providing T.M.T bars Fe 500 steel rein forcement for R.C C work including straightening, cutting, bending, hook ing, placing in position, lapping and /or weld ing wherever required, tying with binding wire and anchor ing to the adjoining members where ver necessary comple te as per design (laps, hooks and wastage shall not be measured and paid) cost of mate rials,labour,HOM of machinery complete as per specifications.Specification No.KBS1.6.3 (P.18/I. 4. 46.2PW,P&IWTD,BENGALURUCIRCLE-SR 2018-19)									
		Nos								
	Park									

EIRL-3	Slab, Consider 98KGS / Cum			143	95		13604.76	13.60		
	Basic rate	70966.00						13.60	75223.96	1023403.92
	Area Weightage 6%	4257.96								
	Total	75223.96								
	KSRB 4-6.3:Providing and removing centering shuttering, strutting, propping etc.,and removal of form work for flat surface such as suspended floors, roofs, landings, balcon ies and likes,thickness upto 200mm including cost of all materials,labour comple te as per specifications. SpecificationNo.KBS4.6.2 (P.16/I.4.30PW,P&IWTD,BENGALURU CIRCLE-SR 2018-19)									
EIRL-4		Sqm								
	Slab Above Drain			2	468.00	0.15		140.40		
	Coping Drain Concrete			2	468.00	0.20		187.20		
	Basic rate	440.00						327.60	466.40	152792.64
	Area Weightage 6%	26.40								
	Total	466.40								
	KSRRB M300-53. Construction of embankment with approved material Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300- 2 complete as per specifications.(Including cost of gravel / murrum, watering charges & compaction by vibratory roller to 95% of proctors density) MORTH Specification No. 305									
EIRL-5		Cum								
	Park 1 and 2			1	450.00	5.40	0.36	874.80		
								874.80	344.50	301368.60
	Basic rate	325.00								
	Area Weightage 6%	19.50								
	Total	344.50								
									Total Amount	1,75,88,673.67

Assistant Engineer

Assistant Executive Engineer

Executive Engineer

Executive Engineer,
Yelahanka Division,
B.B.M.P, Bangalore-64.

Technical Sanction
Accorded for Rs 1,75,88,673.67
Head of A/C P 3783
CER NO :..78..... Dt:28.01.2022.